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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/141,443	08/27/98	WALEH	A D-95013A

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EXAMINER

MARKOFF, A

ART UNIT	PAPER NUMBER
1746	10

DATE MAILED: 12/06/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/141,443

Applicant(s)

WALEH ET AL.

Examiner

Alexander Markoff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-23 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-23 and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 20) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 3-23 and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Settineri et al (US Patent No 4,363,673).

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Settineri et al teach (see entire document) a method for removing organic compounds from substrates, including metal and ceramic (glass) substrates.

The method comprises subjecting the substrates to a vapor of water-free sulfur trioxide alone or in mixture with other gases such as nitrogen.

The subjecting step is conducted at claimed temperatures. The contact times disclosed by the reference are inside of the claimed region.

The subjecting step is conducted after a pretreatment such as heating and/or flushing with gases such as nitrogen.

The sulfur trioxide treatment is followed by a step of subjecting substrates to a gas stream (nitrogen) to remove sulfur trioxide. At some embodiments this step is conducted at the same temperature elevated temperatures as the sulfur trioxide treatment.

After removing sulfur trioxide the substrates are subjected to one or more rinsing steps. The rinsing agents disclosed by the reference are the same as claimed.

The substrates are subjected to kinetic energy (stirring) during the rinsing.

The rinsed substrates are subjected to a drying process, such as nitrogen drying.

It is also noted that the use of kinetic energy in post rinse treatment is inherently disclosed by the disclosure of nitrogen drying, because nitrogen streams used for drying would apply kinetic energy to substrates.

It is ~~noted~~ that the Applicants amended the claims to broad recitation of the electromagnetic radiation. Thereby now the claimed physical treatment can also be interpreted as subjecting the substrate to any radiation, including visible light.

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It is also noted that the Applicants amended the claims to specifically recite organic materials.

However, the Examiner's position that it is well-known that many conventional oils and greases include organic polymers. Thereby it would have been obvious to an ordinary artisan at the time the invention was made that the teaching of Settineri et al, which disclose various organic compounds and, specifically, the compounds from oils and greases, encompass non-specified organic polymers recited by the claims. And, since, the method of Settineri et al is not limited to any specific organic compound or any specific oil or grease, it would have been obvious to an ordinary artisan at the time the invention was made that the method would remove organic compounds which are organic polymers.

Response to Arguments

5. Applicant's arguments filed 8/9/00 have been fully considered but they are not persuasive.

The Applicants amended the claims to more specifically recite organic materials, which are removed by the method. The Applicants argue that the substrates and the organic materials to be removed of Settineri et al are different from the substrates and the organic materials of the invention.

This is not persuasive because the Applicants arguments are more specific than the claims. The broad recitation of devices (the claims still recite non-specified ceramic devices) and organic materials (the claims still recite non-specified organic polymers) in

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the claims allows one to properly apply the patent issued to Settineri et al to reject the claims.

The question whether or not the method of Settineri et al would work in the field of microelectronics (raised by the Applicants in their remarks) is not relevant now, and would not be considered and discussed.

Terminal Disclaimer

6. The terminal disclaimer filed on 8/9/00 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No 5,763016 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 703-308-7545. The examiner can normally be reached on Monday - Friday 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 703-308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Alexander Markoff
Primary Examiner
Art Unit 1746

ALEXANDER MARKOFF
PRIMARY EXAMINER

am
December 2, 2000